

What is claimed is:

1. An air dryer, comprising a base member (1) and a main cartridge (2) attached thereto and containing means (4) for drying and possibly filtering and/or cleaning air passing there through, characterized in that an intermediate cartridge (3), containing means (11, 12, 14, 15) for drying and possibly filtering and/or cleaning air passing there through, is arranged between the base member (1) and the main cartridge (2).

2. An air dryer according to claim 1, wherein the means (11, 12, 14, 15) for drying and possibly filtering and/or cleaning air in the intermediate cartridge (3) are arranged to complement and/or supplement the means (4) for drying and possibly filtering and/or cleaning air in the main cartridge (2).

3. An air dryer according to claim 1, wherein the intermediate cartridge (3) is arranged to be fastened by corresponding means as the main cartridge (2) to the base member (1).

4. An air dryer according to claim 3, wherein the intermediate cartridge (3) is provided with a central internal thread (7) in its bottom portion for cooperation with a corresponding external thread in the base member (1) and a central external thread (8) in its upper portion for cooperation with a corresponding internal thread in the main cartridge (2).

5. An air dryer according to claim 2, wherein the main cartridge (2) contains silica gel with fine pores (4) or molecular sieve and the intermediate cartridge (3) contains a pre-filter (11) and silica gel with large pores (12) for the air flow before the main cartridge (2) and molecular sieve (14) and a fine filter (15) for the air flow after the main cartridge.

6. An air dryer according to claim 5, wherein the silica gel with large pores (12) is arranged in an annular outer compartment of the intermediate cartridge (3) and the molecular sieve (14) in a cylindrical central compartment thereof.

7. An intermediate cartridge (3) for use in an air dryer according to any of the preceding claims.